

ABSTRACT OF THE DISCLOSURE

Methods and apparatus are provided for executing processor tasks on a multi-processing system. The multi-processing system includes a plurality of sub-processing units and a main processing unit that may access a shared memory. Each sub-processing unit includes an on-chip local memory separate from the shared memory. The methods and apparatus contemplate: providing that the processor tasks be copied from the shared memory into the local memory of the sub-processing units in order to execute them, and prohibiting the execution of the processor tasks from the shared memory; and migrating at least one processor task from one of the sub-processing units to another of the sub-processing units.